

ABSTRACT OF THE DISCLOSURE

A lancing device is adapted for use in firing a lancet into the skin of a patient to acquire a blood sample and, subsequent thereto, calculating and displaying the concentration of glucose in the acquired sample. In one embodiment, the device comprises a lancet and a torsion spring coupled to the lancet through a lancet holder. The torsion spring includes inner, middle and outer rings which are concentrically configured, a plurality of activation spring arms which connect the middle and outer rings and a plurality of return spring arms which connect the inner and middle rings. In use, the plurality of activation and return spring arms can be independently transformed between energized and de-energized states using a single, button-shaped mechanism. Rotation of the mechanism is used to energize the activation and return spring arms. With the return spring arms maintained in their energized state, depression of the mechanism transforms the activation spring arms from their energized state to their de-energized state which drives the lancet from a retracted position to an extended position. Once the activation spring arms reach their de-energized state, the return spring arms transform from their energized state to their de-energized state which pulls the lancet back from its extended position to its retracted position.